

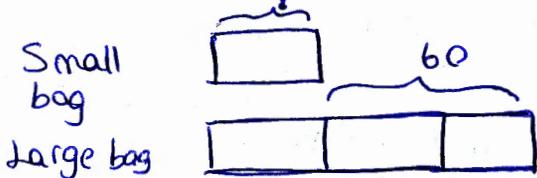
* Your picture / diagram should include all of the information given [i.e. picture problem completely]

* unknown should be labeled * write a solution statement

Problem Solving and Teacher's Solutions
Activity 2
Math-T101 Spring 2014

Name: Serife Sevis

Problem 1. One large bag of oranges has 3 times as many oranges as a small bag. If there are 60 more oranges in the larger bag, then how many oranges are in the smaller one?

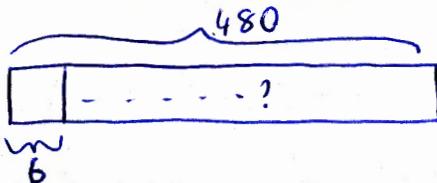


$$\begin{array}{l} 2 \text{ units} = 60 \\ 1 \text{ unit} = 30 \end{array} \Bigg) \div 2$$

There are 30 oranges in the smaller bag.

Problem 2. Harri bought a box of 480 oranges.

(a) He put them into little bags of 6 oranges each. How many bags was he able to make? → measurement div.

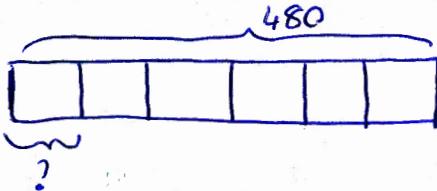


$$480 \div 6 = 240 \div 3 = 80$$

%2 %2

He can make 80 bags of 6 oranges each.

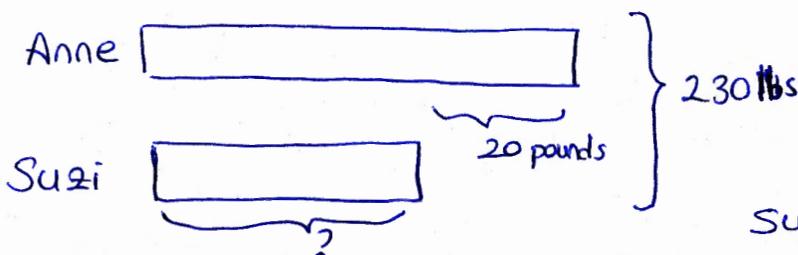
(b) He divided them equally among 6 bags, how many oranges were in each bag? → partitive div.



$$\begin{array}{l} 6 \text{ units} = 480 \\ 1 \text{ unit} = 80 \end{array} \Bigg) \div 6$$

There are 80 oranges in each bag.

Problem 3. Suzi is 20 pounds lighter than Anne. Their total weight is 230 lbs. Find Suzi's weight.

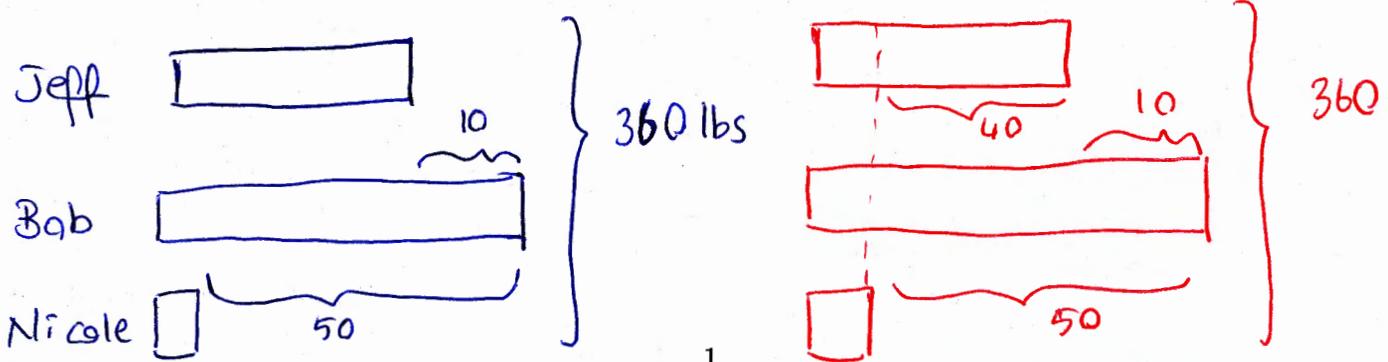


$$230 - 20 = 210$$

$$\begin{array}{l} 2 \text{ units} = 210 \\ 1 \text{ unit} = 105 \end{array} \Bigg) \div 2$$

Suzi's weight is 105 pounds.

Problem 4. Altogether Jeff, Bob, and Nicole weight 360 lbs. Jeff is 10 pounds lighter than Bob, and Bob is 50 pounds heavier than Nicole. How much does Nicole weight?



$$360 - 40 - 50 = 3 \text{ units} = 270 \Bigg) \div 3$$

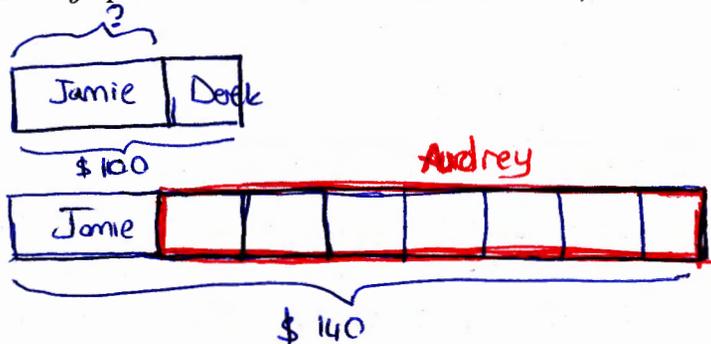
1 unit = 90

Nicole's weight is 90 lbs

Note: Don't mess up your first diagram.

Two-step Problem

Problem 5. Jamie and Derek spent \$100 together. Jamie and Audrey spent \$140 together. If Audrey spent 6 times as much as Derek did, then how much did Jamie spend?



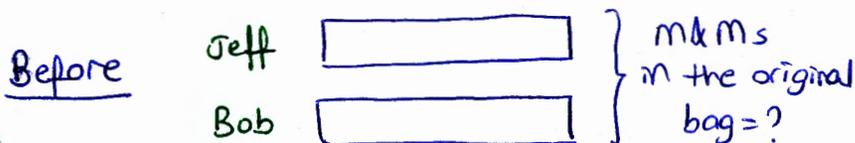
$$\begin{aligned}
 140 - 100 &= 5 \text{ units} \\
 40 &= 5 \text{ units} \\
 \div 5 &\downarrow \\
 8 &= 1 \text{ unit} \\
 100 - 8 &= 92
 \end{aligned}$$

Step 1

Step 2

Jamie spent \$92.

Problem 6. (Poster Problem 1) Jeff and Bob began their day by splitting a bag of M & M's equally among themselves. Throughout the day Jeff ate 600 M & M's while Bob only ate 240. At the end of the day Bob observed that he still had 7 times as many M & M's as did Jeff. How many M & M's were in the original bag?



$$\begin{aligned}
 600 - 240 &= 360 \\
 \div 6 &\downarrow \\
 6 \text{ units} &= 360 \\
 1 \text{ unit} &= 60
 \end{aligned}$$

Step 1



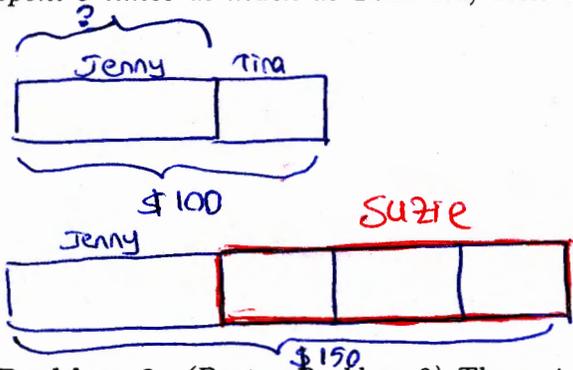
$$\begin{aligned}
 600 + 60 &= 660 \\
 660 + 660 &= 1320
 \end{aligned}$$

Step 2

Step 3

There were 1320 M & M's in the original bag.

Problem 7. (Poster Problem 2) Jenny, Tina, and Suzie went to the mall. Jenny and Tina spent a total of \$100 while Jenny and Suzie spent a total of \$150. If you know that Suzie spent 3 times as much as Tina did, then how much did Jenny spend?



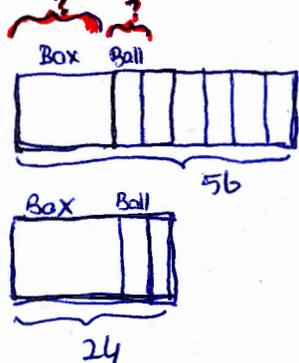
$$\begin{aligned}
 150 - 100 &= 2 \text{ units} \\
 \div 2 &\downarrow \\
 50 &= 2 \text{ units} \\
 25 &= 1 \text{ unit} \\
 100 - 25 &= 75
 \end{aligned}$$

Step 1

Step 2

Jenny spent \$75

Problem 8. (Poster Problem 3) The weight of a box with 6 identical weight balls in it is 56 kg, and the same box with 2 of those weight balls weights 24kg. Find the weight of each ball and the box.



$$\begin{aligned}
 56 - 24 &= 32 \\
 \div 4 &\downarrow \\
 4 \text{ units} &= 32 \\
 1 \text{ unit} &= 8 \text{ lb} \rightarrow \text{The weight of each ball is } 8 \text{ pounds} \\
 \times 2 &\downarrow \\
 2 \text{ units} &= 16 \\
 24 - 16 &= 8 \text{ lb} \rightarrow \text{The weight of box is } 8 \text{ pounds}
 \end{aligned}$$